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(71) Applicant *(for all designated States except US)*: THE BOARD OF REGENTS OF THE UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF NEVADA on behalf of THE UNIVERSITY OF NEVADA–RENO [US/US]; University of Nevada–Reno, Reno, NV 89557 (US).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: ANZIANO, Paul, Q. [US/US]; MS360/UNR, University of Nevada School of Medicine, Reno, NV 89557 (US).

(74) Agent: LINDEMAN, Jeffrey, A.; Morgan, Lewis & Bockius LLP, 1800 M Street, N.W., Washington, DC 20036–5869 (US).

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(54) Title: MANGANESE SUPEROXIDE DISMUTASE EXON 3–DELETED ISOFORMS AND NUCLEIC ACID MOLECULES ENCODING THE ISOFORMS

(57) Abstract

A new isoform of manganese superoxide dismutase (MnSOD) and polynucleotides encoding it have been identified. This isoform, MnSOD E3(–), is a splice variant lacking exon 3 of the full length MnSOD. The polypeptide can be expressed using appropriate host cells. Modulation of either the expression of the polynucleotides of the activity of the polypeptide is also described. Furthermore, diagnostic and therapeutic methods have been developed as a consequence of the isolation of the polynucleotides and polypeptides.